



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/747,677	12/22/2000	V. Michael Bove JR.	WMI-004CN5	4961
23363	7590	01/30/2006		
CHRISTIE, PARKER & HALE, LLP PO BOX 7068 PASADENA, CA 91109-7068			EXAMINER KOENIG, ANDREW Y	
			ART UNIT	PAPER NUMBER

2611

DATE MAILED: 01/30/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/747,677	Applicant(s) BOVE ET AL.	
	Examiner Andrew Y. Koenig	Art Unit 2611	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 November 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 90-121 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 90-121 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 March 2001 and 09 November 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>8/16/05, 11/7/05</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 90-121 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 90-93, 95-101, 103-109, 111-117, and 119-121 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Application Publication 2001/0023436 to Srinivasan et al. (Srinivasan) in view of U.S. Patent 6,006,265 to Rangan et al. (Rangan).

Regarding claims 90 and 106, Srinivasan teaches an authoring system (fig. 7, label 51), for generating image tracking data for overlaying information onto objects of a video stream (pg. 4, para. 0051-0052, pg. 7, para. 0085), which reads on a mask generator generating a mask including graphics data for overlaying a graphic image on a video frame, wherein the image is associated with a video object. The authoring system of Srinivasan provides object data associated with the object in order to track the image, wherein the data includes annotations, such as icons, graphics, text to be

Art Unit: 2611

linked to one of a plurality of program stream (pg. 2, para. 0018, pg. 7, para. 0085), which equates to an annotation source providing object data associated with the video object, the object data including an indicia indicative that the video object is linked to one of the plurality of multiplexed program streams, and an identifier for a particular one of the plurality of multiplexed program streams. Srinivasan teaches an encoder to encode the mask and object data into the television stream (pg. 2, para. 0018, pg. 8, para. 0091, 0096). Srinivasan teaches a broadcaster, which inherently has a transmitter, in that Srinivasan teaches broadcasting the signal and the plural streams to receivers (fig. 8, label 47, pg. 7, para. 0087). Srinivasan teaches a receiver (fig. 9) combining and video with the annotation stream (pg. 12, para. 0134) the displaying the streams on display module (pg. 12, para. 0137, fig. 12, label 139) (which equates to capable of retrieving and overlaying the image on the frame), Srinivasan teaches receiving user input (which reads on capable of receiving viewer actuation of the graphic image) (pg. 12, para. 0138). However, Srinivasan is silent on reviewing the indicia in the object to determine whether the object is linked to one of the program streams, and in response to determining that the object is linked to one of the program streams, switching from the current program stream to presenting the particular one of the program streams. In analogous art, Rangan teaches hotspots and associated hyperlinks (col. 24, ll. 61-65), wherein when the user clicks on a hotspot, the system may branch to a web-page or alternatively to another video (col. 27, ll. 52-65), which reads on reviewing the indicia in the object to determine whether the object is linked to one of the streams and in response to determining that the object is linked to one of the

Art Unit: 2611

program streams, switching from the current program stream to presenting the particular one of the program streams.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Srinivasan by reviewing the indicia in the object to determine whether the object is linked to one of the program streams, and in response to determining that the object is linked to one of the program streams, switching from the current program stream to presenting the particular one of the program streams as taught by Rangan in order to facilitate navigation to different programs and accessing desirable information to the user.

Regarding claims 98 and 114, Srinivasan teaches an authoring system (fig. 7, label 51), for generating image tracking data for overlaying information onto objects of a video stream (pg. 4, para. 0051-0052, pg. 7, para. 0085), which constructs a mask including graphics data for overlaying a graphic image on a video frame, wherein the image is associated with a video object and object data, which is received by the receiver (fig. 12, pg. 11-12, para. 0132), which inherently has a tuner in order to demodulated the signals for the broadcaster. The authoring system of Srinivasan provides object data associated with the object in order to track the image, wherein the data includes annotations, such as icons, graphics, text to be linked to one of a plurality of program stream (pg. 2, para. 0018, pg. 7, para. 0085), which equates to providing object data associated with the video object, the object data including an indicia indicative that the video object is linked to one of the plurality of multiplexed program

Art Unit: 2611

streams, and an identifier for a particular one of the plurality of multiplexed program streams. Srinivasan teaches a decoder to decode the mask and object data from the television stream ((pg. 12, para. 0137, fig. 12, label 139).

Srinivasan teaches a broadcaster, which inherently has a transmitter, in that Srinivasan teaches broadcasting the signal and the plural streams to receivers (fig. 8, label 47, pg. 7, para. 0087). Srinivasan teaches a receiver (fig. 9) combining and video with the annotation stream (pg. 12, para. 0134) the displaying the streams on display module (pg. 12, para. 0137, fig. 12, label 139) (which equates to capable of retrieving and overlaying the image on the frame), Srinivasan teaches receiving user input (which reads on capable of receiving viewer actuation of the graphic image) (pg. 12, para. 0138). However, Srinivasan is silent on reviewing the indicia in the object to determine whether the object is linked to one of the program streams, and in response to determining that the object is linked to one of the program streams, switching from the current program stream to presenting the particular one of the program streams. In analogous art, Rangan teaches hotspots and associated hyperlinks (col. 24, ll. 61-65), wherein when the user clicks on a hotspot, the system may branch to a web-page or alternatively to another video (col. 27, ll. 52-65), which reads on reviewing the indicia in the object to determine whether the object is linked to one of the streams and in response to determining that the object is linked to one of the program streams, switching from the current program stream to presenting the particular one of the program streams.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Srinivasan by reviewing the indicia in the object to determine whether the object is linked to one of the program streams, and in response to determining that the object is linked to one of the program streams, switching from the current program stream to presenting the particular one of the program streams as taught by Rangan in order to facilitate navigation to different programs and accessing desirable information to the user.

Regarding claims 91, 99, 107, and 115, Srinivasan teaches the presented program stream is a video stream (pg. 8, para. 0091).

Regarding claims 92, 100, 108, and 116, Srinivasan teaches the presented program stream is an audio stream (pg. 8, para. 0091).

Regarding claims 93, 101, 109, and 117, Srinivasan teaches the graphics image is overlaid on the video object (pg. 4, para. 0052).

Regarding claims 95, 97, 103, 105, 111, 113, 119, and 121. Srinivasan teaches the television broadcast signal as MPEG which is a digital signal (pg. 8, para. 0091).

Regarding claims 96, 104, 112, and 120, Srinivasan teaches the television broadcast signal is an analog signal (pg. 8, para. 0091).

4. Claims 94, 102, 110, 118 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Application Publication 2001/0023436 to Srinivasan et al. (Srinivasan) and U.S. Patent 6,006,265 to Rangan et al. (Rangan) in view of U.S. Patent 6,452,598 to Rafey et al. (Rafey).

Regarding claims 94, 102, 110, 118, Srinivasan teaches is silent on a receiver is further capable of determining whether the video object is visible in the video frame and, responsive to a determination that the video object is visible in the video frame, overlaying the graphics image on the video frame.

In analogous art, Rafey teaches interfacing 3-D graphics content with broadcast video, wherein the system transmits a mask and timing information (via a timelist) for the video to implement shaped video effects and the viewer device renders to make the appropriate regions visible to the user (col. 8, ll. 39-50), which equates to receiver is further capable of determining whether the video object is visible in the video frame and, responsive to a determination that the video object is visible in the video frame, overlaying the graphics image on the video frame.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Srinivasan by using a receiver that is further capable of determining whether the video object is visible in the video frame and, responsive to a determination that the video object is visible in the video frame, overlaying the graphics image on the video frame as taught by Rafey in order to

Art Unit: 2611

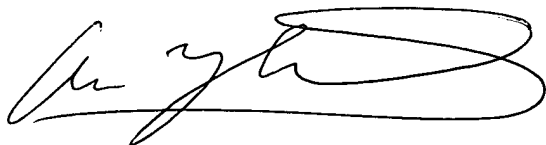
incorporate interactive graphics into the digital broadcast content to greatly enrich the viewers' experience (Rafey: col. 1, ll. 46-50).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew Y. Koenig whose telephone number is (571) 272-7296. The examiner can normally be reached on M-Th (7:30 - 6:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher Grant can be reached on (571) 272-7294. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



ayk